What is Claimed Is:

1. A connector element for connecting a fluid line, preferably a length of tubing, cannulas or catheters to a second connector element, comprising:

a conduit for conveying a flowing medium;

a sealing part movable relative to the conduit between a closed position and an open position, adapted for sealing the conduit from an ambient atmosphere when in the closed position; and

an opening element connected to the second connector element to open the sealing part while forming the connection, wherein the sealing part does not contact the conduit either when in the closed position or in the open position.

2. The connector element according to Claim 1, wherein the sealing part comprises a base body defining a passage and a membrane extending over the passage of the base body.

3. The connector element according to Claim 2, wherein the base body is a cylindrical shell, and the membrane is disposed on one end portion of the base body.

4. The connector element according to Claim 2, wherein the membrane has a shaped slit to facilitate opening when forming the connection.

5. The connector element according to Claim 2, wherein the membrane is a silicone membrane.

6. The connector element according to Claim 1, wherein the conduit for conveying a flowing medium is defined by an inner socket connector.

7. The connector element according to Claim 6, wherein the opening element is formed of an outer socket connector surrounding the conduit for conveying the medium.

8. The connector element according to Claim 7, wherein the outer socket connector is disposed concentrically around the inner socket connector, and wherein the opening element of the outer socket connector projects further towards the second connector element than the inner socket connector defining the conduit for conveying the medium.

9. The connector element according to Claim 1, further comprising a housing containing the conduit for conveying the medium and the opening element.

10. The connector element according to Claim 9, wherein the housing and the opening element form an annular gap therebetween for containing the sealing part when in the open position.

11. The connector element according to Claim 10, wherein the sealing part is secured to the housing by a lock.

12. The connector element according to Claim 1, further comprising a shut-off element adapted for sealing the conduit.

13. The connector element according to Claim 12, further comprising a penetration body movable relative to the shut-off element and adapted for opening the shut-off element when forming the connection.

14. The connector element according to Claim 13, wherein the penetration body is disposed within the inner socket connector.

15. The connector element according to Claim 14, wherein the penetration body comprises a projection for engaging the opening element of a second inner socket connector of the second connector element when forming the connection.

16. The connector element according to Claim 12, wherein the shut-off element is an injection molded membrane.

17. A method for connecting fluid lines, preferably first and second lengths of tubing, cannulas or catheters, comprising:

attaching a first connector element to the first length and a second connector element to the second length;

pushing a housing of the second connector element into an housing of the first connector element, so that an outer socket connector of the first connector element acts on a sealing part of the second connector element to open the sealing part of the second connector element, and an outer socket connector of the second connector element acts on a sealing part of the first connector element to open the sealing part of the first connector element;

further pushing the housing of the second connector element into the housing of the first connector element, so that a recessed inner socket connector of the first connector element forms a continuous conduit with a recessed inner socket connector of the second connector element; and

further pushing the housing of the second connector element into the housing of the first connector element so that a penetration body of the first connector element opens shut off elements of the first and second connector elements.